did also the spinal column, at the third dorsal vertebræ: no trace of nerves could be detected going to the lower part of the abdomen, pelvis, or lower extremities.

The pectoral muscles, and those of the arm, well developed; the lungs had not been inflated, except the superior lobe of the left lung; heart natural.

Nothing peculiar was observed in the abdominal viscera, except that the two kidneys were contained in a single capsule; the testes were found high up in the abdomen. The two ossa ilia were united together, the sacrum being absent.

No trace of muscles could be found on the abdomen or lower extremities, their place was supplied by adipose matter.

Philadelphia Alms-house, Jan. 1830.

ART. XVI. Case of Sea-sickness terminating in a singular affection of the Mind. By John Ware, M. D. of Boston.

I WAS called to the subject of this case on the 16th of April last. I learned, that in December, 1828, about four months before, he had sailed from Liverpool for Charleston, S. C. in his usual health. He had several times before crossed the Atlantic; and, although he had on these occasions been considerably affected by sea-sickness, had not suffered to any severe or dangerous extent. Soon after sailing he became very sick, and continued so, without intermission, until the vessel in which he sailed, having been injured by the severity of the weather, put back into a port in Ireland to repair. The sickness left him, as it usually does, on landing; and during his stay on shore, which lasted about ten days, he continued perfectly well, so far as any thing was obvious to the notice of those around him.

On sailing, his sickness immediately returned. The passage was very rough, and continued for forty-four days, at the end of which he arrived at Charleston. During this period, till the last four days, the sea-sickness was unabated, and he vomited incessantly. As it appeared to others, he retained no food whatever, and was of course reduced to the last extremity. He remained sensible, was aware of his situation, and was in daily expectation of his death, as were those around him. He was not able to rise from his birth, but dictated to another person a letter addressed to his partner, relating to some

matters of business, and containing some directions with respect to some articles of property. This letter, which I saw, was signed with his own hand, and indicated a mind perfectly clear in its recollection, and in its operations

Four days before his arrival, that is, after being forty days in this state, he ceased to vomit, his nausea left him, he became hungry, and was able to take and retain food, but he lost almost entirely the powers of his mind, and his recollection of what had passed. In this state he arrived at Charleston; and after remaining there, at the house of a friend, a few weeks, gradually improving in general health and strength, he was brought to this city by one of his brothers, who had gone on for this purpose. The account which I have thus briefly given of the origin of his disorder, was gathered from the brother in whose house I visited him, and who had learned the particulars from several individuals who were directly or indirectly acquainted with It is highly probable, therefore, that in many respects the above narration may be extremely inaccurate, being made up entirely at second or third hand. It serves, however, to establish the facts of a tolerable freedom from disorder at the time of his sailing, of his excessive sea-sickness, and of the sudden alienation of mind on the return of appetite and power of digestion.

His bodily strength, as we were told, had improved; and what was somewhat remarkable, he had improved during his journey from Charleston, part of which was performed by water without the production of sea-sickness. He was able to sit up in an easy chair a considerable part of every day, though not equally well every day. He appeared to possess a sufficient degree of strength in his arms; but his lower limbs were feeble, and he could hardly walk even with much assistance. His appetite was good, his tongue clean, and his bowels generally in a natural state, both as to the kind and quantity of the evacuations. His pulse was small and feeble, varying in frequency from 96 to 108. His countenance was generally lively and cheerful; but sometimes anxious and clouded. His senses were sufficiently acute as to sensibility; indeed, in the skin generally, and particularly in that of the legs, there seemed to be rather a preternatural degree of this property. He could not bear friction to be applied to the skin without great uneasiness; and when applied to the legs it produced sensations which he called a faintness, but which seemed to proceed from nervous irritation, and which he could not, and would not endure for a moment.

The sensibility of the eye seemed to be perfectly good, but there was an irregularity and unsteadiness in the motions of the ball which

rendered him incapable of seeing objects clearly. The motions of the ball were in some measure like those which occur in common dizziness, but were less decidedly from side to side than in that case. I can only convey my idea of the nature of them by saying that the eye appeared as if alternately under the influence of its voluntary and involuntary muscles; as if the patient was constantly making an effort to direct the eye with muscles over which his controll was imperfect from feebleness, so that the contractions were intermittent and tremulous, whilst in the intermission of the contraction of the voluntary muscles, the eye passed under that of the involuntary, and was thus kept in a state of oscillation between the two. I was confirmed in the opinion that this might be a correct explanation, by the fact, that by a strong effort, particularly when he felt better than usual, he could, for a short time, fix his eyes upon any object so as to see it very well, but would be soon obliged to intermit the exertion, and the irregular motions would immediately return. The consequence of this motion of the eye was of course an apparent motion of external objects. Thus, if he looked at any object across the street, it appeared to him to be moving up and down to the extent of several feet; and in all objects there was an apparent motion proportioned in extent to their distance. This prevented him from discerning countenances accurately, and from reading. The attempt to read produced a sensation in the forehead too unpleasant to be endured. The kind of motion thus produced in external objects may be somewhat illustrated by the manner in which he described his sensations when able to walk out some time afterwards. On some days, when not so well as usual, the apparent motion of objects would return, he found it difficult to use his feet steadily, and frequently said, "there is a high sea running," not because he believed himself at sea, but because the apparent motions of objects about him were like that which he had experienced when on board a vessel. These sensations were sometimes such as to produce the qualmish feeling of sea-sickness.

The most remarkable and interesting part of his case, however, relates to the state of his mind. There appeared to be a total loss of memory of recent events. In this respect he resembled a person in extreme old age. He could recollect with distinctness what had occurred many years before, but retained no trace whatever of what had happened for many preceding months. The length of time which was entirely a blank, could not well be determined, because none of the persons around him had been particularly acquainted with his affairs for the few preceding years. It was still very evident, that be-

sides having lost entirely the recollection of many of the last months. the events of a considerably long period, probably of one or two years, existed in his mind in a confused and disturbed manner. He at times, when questioned, admitted he had an indistint impression of having suffered from sea-sickness, but not a vestige remained in his mind of any other circumstance which had occurred during his absence in Europe, or during his passage home. His mind evidently went back, when questioned on this point, to some voyage preceding that during which he had actually suffered.

But though thus lost with regard to every thing recent, he would converse with entire correctness and recollection on all subjects connected with the events and pursuits of the earlier periods of his life. He gave accounts of the population, manners, habits, &c. of New Orleans, where he had formerly transacted business, of incidents occurring to him during his residence there, and of persons with whom he had been in company, such as any intelligent man would have given who was in full possession of all his faculties. No one would have suspected from his ordinary conversation on topics of this kind, that there was any thing peculiar in the state of his mind. It was when recent events were inquired about that the affection became manifest.

The conversation addressed to him from day to day, and common events as they passed, seemed to make no more impression on his mind, than if they had been written on water. He would forget the name of the person with whom he was speaking, unless it were some one with whom he had been formerly acquainted. If asked a question about even the most common personal occurrence, as whether he had slept well, whether he had an appetite, what he had eaten, &c. he would refer to his sister for an answer, having himself no recollection with regard to the fact. He had an absolute conception only of what was immediately present, and had no idea of the lapse of time, of the season of the year, or of the place in which he was. He required to be continually reminded that it was spring, that he was in Boston, and in his brother's house.

The place of his birth was in the neighbourhood of Boston, and his relations all resided here, but he had been absent thirteen years. When made sensible that he was in Boston, of which, as I have already said, he required to be constantly reminded, his mind seemed to go back, and take things up precisely as they were when he left All that he said about his relations and friends implied this im-The brother, for instance, in whose house he was, now about twenty-six years of age, he supposed to be another brother, who had been of that age when he last saw him; his sister's daughters, who had grown up during his absence, he considered as his younger sisters. Still he was always ready to be set right with regard to these matters of fact; acknowledged the imperfection of his faculties, but immediately fell into the same mistakes. Indeed he was constantly conscious of the state of mind into which he had fallen, and frequently alluded to it in a very touching manner and with tears.

The nature of the failure in his memory was strikingly illustrated in some of my visits to him. Every morning a fresh introduction became necessary; he had no recollection of my name or my profession, or of the object of my visit. Even when reminded that he had seen me and had talked with me the day before, he could not recal the circumstance. The mention of my name, however, immediately brought to his mind the knowledge of other members of my family, whom he had formerly known, concerning whom he immediately inquired, and in a manner which showed that his recollection of them and their situation, &c. fifteen or twenty years ago, was entirely accurate. This train of recollection was often suggested by the mention of my name. He consequently went over the same inquiries, and gave the same accounts several times, never recollecting that he had done it before, and always evinced the same accuracy of memory with regard to the subjects to which he referred.

Very little was attempted in the way of medical treatment, and no advantage appeared to result from what was attempted. My attendance upon him was continued for but a short time, but I have occasionally seen him since, and once within a few days. Some improvement has taken place. He has recovered the use of his eyes so as to read a little; and he is amused by the occupation, although he retains no recollection of what he reads. His bodily strength has not much improved, and he cannot walk steadily alone. He still retains the peculiar sensibility of his skin. His memory is improved a little. He now remembers a few things of which he is constantly reminded, such as that he is in Boston and in his brother's house, and a few particulars of the same kind. But he had no recollection of my name though he thought that he had of my countenance. He did not even retain my name during the half hour that I spent with him, though he did recollect that I was a physician.

At this visit his conversation seemed to me more like that of a person affected with a permanent alienation of mind. He occupied himself during the whole of the time in a detail of strange and incredible

adventures, which he encountered in his last voyage to Europe and residence there. The story he told was not only extravagant and incredible in itself, but was contradicted by known facts concerning him. Yet he told the whole with an air of entire good faith.

With regard to the nature of this affection, I have little to remark. Its history would have certainly led one at first to suppose that some disease of the brain had existed at the time of sailing, which had aggravated, and at the same time had been aggravated by the sea-sickness. The subsequent history does not certainly forbid this explanation, though it does by no means confirm it.

It is proper in conclusion to remark, that nothing is known either by his friends, or those who came with him from Liverpool, of what had occurred to him during his residence in Europe, and that there may have been causes operating to predispose him to an affection of this kind, of which we shall probably remain ignorant.

Boston, Jan. 6, 1830.